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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,002	11/24/2003	Gregory E. Ross	150449C1	3973

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Frederick Frei
Andrews Kurth LLP
Intellectual Property Department
1701 Pennsylvania Avenue Suite 300
Washington, DC 20006

EXAMINER

JOLLEY, KIRSTEN

ART UNIT	PAPER NUMBER
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1762

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/720,002	Applicant(s) ROSS, GREGORY E.	
	Examiner Kirsten C. Jolley	Art Unit 1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-44 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 23-44 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Reissue Application

1. An inquiry is made into the existence of an assignment in this application. It is noted that there is a statement of non-assignment filed June 2, 2004. However USPTO records indicate that an assignment was filed on May 31, 2006. It is noted that there must be written consent of all assignees owning an undivided interest in the patent in compliance with 37 CFR 1.172. See MPEP § 1410.01. Clarification is required.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 23-44 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 23 of U.S. Patent No. RE 39,044. Although the

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conflicting claims are not identical, they are not patentably distinct from each other because instant claim 23 is broader than, and thus anticipated by, claim 23 of U.S. Patent No. RE 39,044. Further, one would have necessarily used a base having at least three surfaces since all objects are three-dimensional. It would have been obvious to have modified the base to form an edge because shaping of a substrate is a known first step in preparing a product.

Specification

4. The disclosure is objected to because of the following informalities: The first paragraph of the specification should be updated to indicate the U.S. patent number of the parent application (RE 39,044).

Appropriate correction is required.

Claim Objections

5. Claims 26, 30, 34, and 41 are objected to because of the following informalities:

In claim 26, line 3, the phrase “of applied said coatings” is awkward. The Examiner questions whether the phrase should instead be --of said applied coatings--.

In claim 30, line 2, the word --of-- should be inserted after the phrase “selected from a group consisting” in order to be proper Markush language.

In claim 30, at the end of line 2, it appears that “disposes” should be --disposing--.

In claim 34, line 4, it appears that --(iv)-- should be added before “said”.

In claim 41, line 6, it appears that the comma should be deleted.

Appropriate correction is required.

Claim Rejections - 35 USC § 112/251

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 23-44 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

8. Claims 23-44 are rejected under 35 U.S.C. 251 as being based upon new matter added to the patent for which reissue is sought. The added material which is not supported by the prior patent is as follows:

In claim 23, the limitation “wherein said edge alignment is achieved without mechanically altering an edge portion of either applied coating” appears to be new matter. In claim 32, the limitation “wherein said alignment is achieved without mechanical alteration to either of said base, said first coating, and said second coating” appears to be new matter. In claim 37, the limitation “without having mechanically altered either applied said coating” appears to be new matter. And in claim 41, the limitation “without recourse to mechanical alteration of said coating” appears to be new matter. It is the Examiner’s position that these newly added negative limitations introduce new matter because it has been held that negative limitations, which did not appear in the specification as-filed, introduce new concepts and violate

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the description requirement of 35 U.S.C. § 112. *Ex parte Grasselli et al.*, 231 USPQ 393 (Bd Pat App & Int 1983): "It might be added that the express exclusion of certain elements implies the permissible inclusion of all other elements not so expressly excluded. This clearly illustrates that such negative limitations do, in fact, introduce new concepts."

9. Claims 23-31 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for modifying the first coating by making it opaque or transparent, expand or contract, or have a surface reaction upon exposure to energy, does not reasonably provide enablement for "modifying at least a portion of said first coating ... such that a characteristic of said first coating is altered", as claimed in claim 23. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims because the specification does not disclose every possible alteration of the first coating by any means. There is not support in the disclosure commensurate in scope with claims 23-31.

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 27, 31-36, 38, and 44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 27, the phrase "at least one of said applying the first coating and said applying at least the second coating *further includes* applying at least one coating to at least a portion of a

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surface of said substrate opposite said side of said substrate to which said first coating was applied [emphasis added]” is vague and indefinite because it is confusing. It is not clear how applying at least one coating to the substrate surface opposite to which the first coating was applied *further limits* either the process step of applying the first coating or the process step of applying the second coating.

In claim 31, line 1, “said coating” is vague and indefinite because it is not clear which coating is being referred to.

In claim 32, line 15, the phrase “after step (d)” renders the claim vague and indefinite because there is no step (d) introduced in the claim. Therefore it is not known when the modifying step occurs.

In claim 38, line 1, the claim is vague and indefinite because it is not clear which coating layer the phrase “at least one said coating” is referring to.

Claim 44 is vague and indefinite because it contradicts claim 41 from which it depends. Claim 44 requires that the base surface is modified to define at least one edge of the base substrate *after applying the second coating*. However claim 41 requires that the edge is used in applying both the first and second coatings. Therefore it is not clear what is required by claim 44.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 23-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Hill (US 4,673,609).

With respect to independent claim 23, Hill discloses a method of forming a pattern of at least two coatings onto a base substrate to achieve edge alignment between at least a part of each of said coatings along at least a part of one edge of said pattern, comprising the steps of: providing a see-through base material as the substrate; applying a first coating to at least a part of the base; and applying at least a second coating over at least a portion of said first coating, as seen in Figure 2. Hill illustrates edge alignment of the two coatings in Figure 2, as well as teaches that the coatings are superimposed with as exact registration as possible (col. 8, lines 67-68). In col. 10, lines 38-49, Hill discloses use of a transfer method for applying the coatings where a transfer or decal having ceramic inks are applied to a glass base material, following by heating in a toughening furnace such that the carrying membrane is burnt off and the ceramic ink is fused into the surface of the glass. Hill teaches "more than one of these can be placed side by side to build up the required area." It is the Examiner's position that in building up first and second coating layers and then heating the built-up decal/transfer simultaneously, a characteristic of the first coating over-covered by the second coating is necessarily altered during the fusing process. Alternatively, in the case of applying each layer of ceramic ink by transfer/decal successively (one layer at a time), a characteristic of the first coating over-covered by the second coating is altered since the temperature of the first coating is elevated during the heating step of fusing the second coating. Further, edge alignment is achieved without mechanically altering an

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edge portion of either applied coating. As to claims 24 and 26, the first and second coatings are transferred by heat application.

Alternatively, with respect to claim 23, Hill teaches that first and second coatings may be applied on top of a stencil which is dissolved by solvent after application of the coatings (col. 9, lines 28-34, and col. 12, lines 6-16). In this case a portion of the first coating over-covered by the second coating will be modified such that a characteristic of the first coating is altered (i.e., its size is altered by removal of parts of the first coating located on the stencil). In this case, edge alignment is achieved without mechanically altering an edge portion since the edge portion is instead chemically altered.

As to claim 27, Hill teaches applying at least one coating material to a surface of the substrate opposite the side of the substrate to which the first coating was applied in col. 8, lines 56-65. As to claim 28, light passages are formed in the spaces where ink is not applied, which are bordered by a plurality of edges of ink. As to claims 29-31, Hill discloses applying its product to automobile windows, or applying it proximate to plastic see-through sheets, which may be applied using heat and/or pressure (col. 8, lines 67-68 and col. 14).

With respect to independent claim 32, Hill discloses a method of forming a laminate pattern of coatings onto a material comprising the steps of: providing a base having at least three surfaces; modifying said base to provide a desired pattern of edges; applying a first coating having a first coating portion to at least one of a first surface of said base; and applying at least a second coating over at least a portion of said first coating so as to define a laminate pattern of coatings with perimeter coating alignment along at least one defined edge, wherein said

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alignment is achieved without mechanical alteration to either of said base, said first coating, and said second coating (see Figure 23 and col. 19, lines 40-56). As to the ink first coating, its shape is *modifiable* by energy applied during said method of forming. In other words, the shape of the first coating is *capable* of being modified by drying of the coating material using energy, such as heating energy. Alternatively, the shape of the first coating is capable of being modified by laser removal of the coating material. The term “edge” is defined by Merriam-Webster’s Collegiate Dictionary, Tenth Edition as “a line or line segment that is the intersection of two plane faces (as of a pyramid) or of two planes.”

Alternatively, it is noted that Hill teaches, in col. 13, lines 37-49, that sheet or film material can be perforated and then the multiple layers of ink may be applied thereon, wherein “the holes of whatever shape forming the transparent areas.” Thus Hill teaches applying successive ink coatings on a sheet or film having a desired pattern of edges so as to define a laminate pattern of coatings with perimeter alignment along the defined edges, wherein alignment is achieved without mechanical alteration.

As to claim 33, Hill teaches that the base material may be plastic in col. 14, lines 51-65. As to claim 34, Hill teaches that the coating materials may be ink. As to claim 35, Hill teaches that the base material may be silverized in col. 14, lines 66-68. As to claim 36, Hill discloses applying a coating to a surface of the substrate opposite the side of the substrate to which the first coating was applied in col. 8, lines 56-65.

With respect to independent claim 37, Hill discloses a method of forming a pattern of coatings onto a panel comprising the steps of: providing a base that forms a support substrate;

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modifying said base to form an edge to define a perimeter for coatings to be applied subsequently; then applying a first coating having a first coating portion to at least a part of said base so as to be in proximity to said edge; and applying at least a second coating over at least a portion of said first coating so as to be in proximity to said edge, wherein alignment exists between said first coating and said second coating at said edge without having mechanically altered either coating (see Figure 23 and col. 19, lines 40-56). As to the ink first coating, its shape is *modifiable* by energy applied during said method of forming. In other words, the shape of the first coating is *capable* of being modified by drying of the coating material using energy, such as heating energy. Alternatively, the shape of the first coating is capable of being modified by laser removal of the coating material. The term “edge” is defined by Merriam-Webster’s Collegiate Dictionary, Tenth Edition as “a line or line segment that is the intersection of two plane faces (as of a pyramid) or of two planes.”

Alternatively, it is noted that Hill teaches, in col. 13, lines 37-49, that sheet or film material can be perforated and then the multiple layers of ink may be applied thereon, wherein “the holes of whatever shape forming the transparent areas.” Thus Hill teaches applying successive ink coatings on a sheet or film having a edges that define a perimeter for coatings, whereby the coatings applied are in proximity to the edge and alignment exists at the edges without mechanical alteration.

As to claims 39-40, Hill teaches that the patterned perforated sheets may then be formed within or attached to transparent sheet or film materials. Such attachment or forming within meets the claimed limitations of transferring the coatings to a material, and transferring by one of the claimed means.

With respect to independent claim 41, Hill discloses a method of forming a laminate pattern of coatings onto a material comprising the steps of: providing a base substrate having at least one base surface; modifying said base surface to form an edge to define at least one edge of said base substrate; applying a first coating having a first coating portion to said base substrate so as to use said edge of said base substrate to define at least one perimeter of said first coating; and applying a second coating adjacent the first coating so as to use said edge of said substrate to define at least one perimeter of said second coating, and to use another edge of said first coating to define a second edge, wherein successive coatings are aligned along said edge of said substrate and also at regions of said successive coatings not immediate adjacent said edge of said substrate without recourse to mechanical alteration of said coatings (see Figure 23 and col. 19, lines 40-56). As to the ink first coating, its shape is *modifiable* by energy applied during said method of forming. In other words, the shape of the first coating is *capable* of being modified by drying of the coating material using energy, such as heating energy. Alternatively, the shape of the first coating is capable of being modified by laser removal of the coating material. The term “edge” is defined by Merriam-Webster’s Collegiate Dictionary, Tenth Edition as “a line or line segment that is the intersection of two plane faces (as of a pyramid) or of two planes.” As to claim 44, Hill teaches modifying the substrate by removing protective coating 60 after the second coating is applied; removal of protective coating 60 defines at least one edge of the base substrate.

Alternatively, it is noted that Hill teaches, in col. 13, lines 37-49, that sheet or film material can be perforated and then the multiple layers of ink may be applied thereon, wherein

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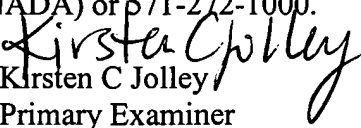
“the holes of whatever shape forming the transparent areas.” Thus Hill teaches applying successive ink coatings on a sheet or film having a pattern of edges, wherein the successive coatings use the edges of the base substrate to define perimeters of the coatings, without recourse to mechanical alteration of the coatings.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kirsten C. Jolley whose telephone number is 571-272-1421. The examiner can normally be reached on Monday to Wednesday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Kirsten C Jolley
Primary Examiner
Art Unit 1762

kcj